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(54) Title: METHOD AND SYSTEM FOR COMPOSITING THREE-DIMENSIONAL GRAPHICS IMAGES USING ASSOCIATIVE DECISION MECHANISM

(57) Abstract: A method and system for compositing a plurality of three-dimensional Sub-Images by examining the Depth values of the Pixels corresponding to same spatial location in each Sub-Image and compositing the content of the Pixel having the greatest Depth value. The Depth values are divided into two or more binary Segments, where the bit length of the Segments is determined according to their level of significance. In a first step, the numerical values of the Segments having the same level of Significance are simultaneously compared, and accordingly a group designating the Depth values which the numerical value of their Most Significant Segment is the greatest is determined, and a Grade is evaluated for the Least Significant Segments indicating their numerical size in comparison with the numerical value of the other Segments of the same level of significance. In a second step, the Grades of the Segments of the Depth values which corresponds to the group are compared, and Depth value indications are removed from the group if their Grade is less than the highest Grade which corresponds to another Depth values in the group. The second step is repeated until the last set of Segments is reached or until a single Depth values is designated by the group.

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